



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

**NOTICE OF ALLOWANCE AND ISSUE FEE DUE**

LM61/0324

SCHWEGMAN LUNDBERG WOESSNER & KLUTH  
P O BOX 2938  
MINNEAPOLIS MN 55402

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/720,373	09/27/96	078	SMITS, T	2741 03/24/98
First Named Applicant	MITCHELL, JOHN C.			

TITLE OF INVENTION  
AUTOMATED PROOFREADING USING INTERFACE LINKING RECOGNIZED WORDS TO THEIR AUDIO DATA WHILE TEXT IS BEING CHANGED  
(AS AMENDED)

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
2 491.003US1	704-235.000	Z99	UTILITY	YES	\$660.00	06/24/98

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE: Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number.  
Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/720,373	09/27/96	MITCHELL	J 491.003US1

LM61/0324  
SCHWEGMAN LUNDBERG WOESSNER & KLUTH  
P O BOX 2938  
MINNEAPOLIS MN 55402

EXAMINER

SMITS, T

ART UNIT	PAPER NUMBER
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2741

13

DATE MAILED: 03/24/98

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# PART B—ISSUE FEE TRANSMITTAL

Complete and mail this form, together with the fee, to: **Box ISSUE FEE**  
**Assistant Commissioner for Patents**  
**Washington, D.C. 20231**

**MAILING INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE. Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

LM61/0324  
 SCHWEGMAN LUNDBERG WOESSNER & KLUTH  
 P.O. BOX 2938  
 MINNEAPOLIS MN 55402

Note: The certificate of mailing below can only be used for domestic mailings of the Issue Fee Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

## Certificate of Mailing

I hereby certify that this Issue Fee Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/720,373	09/27/96	078	SMITS, T	2741 03/24/98
First Named Applicant: MITCHELL, JOHN C.				

OF AUTOMATED PROOFREADING USING INTERFACE LINKING RECOGNIZED WORDS TO  
 NON THEIR AUDIO DATA WHILE TEXT IS BEING CHANGED  
 (AS AMENDED)

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
2	491.003US1	704-235.000	Z99	UTILITY	YES \$660.00	06/24/98

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" indication form PTO/SB/47) attached.

2. For printing on the patent front page, list:  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. Swegman, Lundberg,  
 2. Woessner & Kluth,  
 3. P.A.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

AllVoice Computing Plc

(B) RESIDENCE: (CITY & STATE OR COUNTRY)

Devon, England

Please check the appropriate assignee category indicated below (will not be printed on the patent)

- ☐ individual ☒ corporation or other private group entity ☐ government

4a. The following fees are enclosed (make check payable to Commissioner of Patents and Trademarks):

- ☒ Issue Fee  
☒ Advance Order - # of Copies 10

4b. The following fees or deficiency in these fees should be charged to:

DEPOSIT ACCOUNT NUMBER 19-0743  
 (ENCLOSE AN EXTRA COPY OF THIS FORM)

- ☒ Issue Fee  
☒ Advance Order - # of Copies 10

The COMMISSIONER OF PATENTS AND TRADEMARKS IS requested to apply the Issue Fee to the application identified above.

(Authorized Signature)

*[Signature]*

(Date)

4-30-98

NOTE: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

**Burden Hour Statement:** This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington D.C. 20231

# Notice of Allowability

Application No.  
**08/720,373**

Applicant(s)  
**John C. Mitchell, et al.**

Examiner  
**Talivaldis Ivars Smits**

Group Art Unit  
**2741**



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to Amendment and Response, filed February 13, 1998.

☒ The allowed claim(s) is/are 1-42, 52, and 63-97.

☐ The drawings filed on \_\_\_\_\_ are acceptable.

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

☐ because the originally filed drawings were declared by applicant to be informal.

☒ including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. \_\_\_\_\_.

☐ including changes required by the proposed drawing correction filed on \_\_\_\_\_, which has been approved by the examiner.

☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☒ Interview Summary, PTO-413

☒ Examiner's Amendment/Comment

☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

☒ Examiner's Statement of Reasons for Allowance

## DETAILED ACTION

### *Response to Amendment*

1. In response to the Office Action mailed August 6, 1997, applicants have submitted an Amendment and Response, filed February 13, 1998, affirming the oral election made on July 7 to prosecute the invention of Group I claims, canceling claims 57-62 without prejudice, amending claims 1-32, 34-42 and 52, and adding new claims 63-97 without introducing new matter, and have submitted a **Test Report of NCC Digital Dictate Release 2.3** and an extract from the November 1997 Technology Insider as exhibits for arguing patentable differences between the cited prior art and the pending amended or newly added claims. This response has placed the application in position for allowance, for reasons given below under **Allowable Subject Matter**.

### *Allowable Subject Matter*

2. Claims 1-42, 52 and 63-97 are allowable over the prior art of record and thus are allowed. The following is an examiner's statement of reasons for allowance:

As per amended independent claims 1 (for an apparatus), 13 (for a data processing arrangement), 23 (for the underlying method) and 52 (for a computer usable medium storing the instructions to realize its functionality), they recite an interface application program means or program which determines positions of words and forms link data (audio identifiers and the determined word or character positions) relating the words or characters to their corresponding

audio segments for automated proofreading, and monitors **changes** of recognized words (words moved, reordered, deleted, inserted or formatted) in a wordprocessing application, updating their link data as the text of recognized words is modified by said application program. As applicants argue, the prior art having link data, specifically Digital Dictate Release 2.3 (applicants' Test Report) and IBM Voice Type 1.1 (Specification, p. 2), use the *application* program's own features (bookmarking in MS Word) to determine word positions and update said linking, rather than having this done in an application-independent *interface* that is not dependent of wordprocessor capabilities.

The examiner notes in passing that applicants' assertion that the IBM Automatic Indexing application (EP 0 649 144, also issued as Hamed A. Ellozy *et al.*, U.S. Patent 5,649,060) "does not disclose a system...concerned with allowing for the correction of mis-recognized text output from a speech recogniser by allowing user to select and play back audio data" (Petition to Make Special, Paper No. 6, p. 4), is not strictly correct. For, Ellozy *et al.* point out that "The method can be used...(c) to enhance editing of a text that was dictated to a stenographer or recorded on a tape for its subsequent textual reproduction for a typist" (Abstract), and teach that "Instead of typing, the text may be produced using...a speech recognizer" (col. 5, lines 16-18). However, this does not affect the novelty of the "link data approach" (linking audio identifiers to the corresponding word or character positions) in the instant application, as compared with the IBM "index word" approach, wherein each link data pair consists of the word (or phrase) itself (rather than its location in the transcript) and the audio identifier (a number describing the "time stamp" position of the word in storage or in the recording).

Since amended dependent claims 2-12, 80, 82; 14-22, 42, 81 and 83; and 24-41 and 84-87 further limit claims 1, 13 and 23, respectively, or their parent claims, they are allowable also. Note that the Examiner's Amendment has amended an error in line 1 of claim 83.

As per new claims 63-70 they incorporate the subject matter identified as allowable in the discussion of the original claims 10-11, 17-18, 32-33 and 39-40, in paragraph 8 of the previous Office Action (Paper No. 9). Namely, it recites selectively disabling the importation of recognized characters or of dictated speech recognition for a period of time for the purpose of storing an *audio message* to an editor or proofreader (instructions or a reminder, rather than merely author's textual emendations or instructions to enter such textual emendations, as in prior art), associated with the file of recognized characters from author's dictation, for later playback. In addition, it separately recites a link means for forming link data, linking audio identifiers and the determined character component positions in the processed text, and monitoring character changes after processing and updating the link data thereof, for automated proofreading.

As per new independent claim 71, it recites an universal application-independent speech-recognition *interface* that can output the recognized words for text-processing into any one of a *plurality* of different computer applications, and which allows playback of audio data associated with said words for automated proofreading. Since the prior-art speech-recognition interfaces such as those of Digital Dictate or IBM Voice Type are application-specific, as applicants argue (see above), it is allowable.

Since new dependent claims 72-74 further limit claim 71, they are allowable also.

As per new independent claim 75, it recites a speech-recognition interface *independent* of the computer-related application having means for outputting recognized words into an application program for text-processing, which interface independently determines positions of the recognized words in said application. Since the prior art uses the word-processing application itself to keep track of word positions, as applicants argue (see above), it is allowable also.

Since new dependent claims 76-79 further limit claim 75 or their parent claim, they are allowable also.

As per new independent claims 88 (for a data processing apparatus), 90 (for its underlying method, and 92 (for a computer usable medium to implement its functionality), they recite an interface for receiving speech recognition data that inputs recognized words into a word-processing application program and forms link data, linking audio data via audio identifiers to their recognized words as the words are moved by the processing application, for automated proofreading playback of selectively identified displayed recognized words. Since, as applicants argue, prior art does not have such functions in an interface application but depends on the wordprocessing application to maintain the linking, the claims are allowable.

As per new dependent claims 89, 91 and 93, they further limit claims 88, 90 and 92, respectively, and thus are allowable also.



As per new independent claims 94 (for an apparatus) and 96 (for its underlying method), they recite a *separate* second application program which determines the positions of the recognized words input into a first application program, linking them to their audio data, and updates the link data (audio identifiers and the corresponding word positions) in response to monitored changes in recognized word positions as the words are processed thereby. Again, since, unlike prior art (per applicants' argument), a separate application handles the forming of the link data (audio identifiers and determined recognized word positions) and updates the link data upon changes in the position of recognized words, for automated proofreading, the claims are allowable.

As per new dependent claims 95 and 97, they further limit claims 94 and 96, respectively, and thus are allowable also.

Thus all pending claims (claims 1-42, 52 and 63-97) are allowed.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Examiner's Amendment***

4. An examiner's amendment to the record appears below.

Change the title of the invention to --**Automated Proofreading Using Interface Linking Recognized Words to their Audio Data While Text is Being Changed**--.

In claim 83, line 1, replace "apparatus" by the intended --**arrangement**--, as authorized in a telephone interview with applicants' representative Ann S. Viksnins on March 19, 1998.

5. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

### ***Conclusion***

6. The application having been allowed, new formal drawings are required in response to this Office action so as to overcome Draftsperson's objections on Form PTO 948, attached to this Office Action (since it was not sent with the previous Office Action due to a clerical error).

Formal drawings must be filed within the **THREE MONTH** shortened statutory period set for reply in the "NOTICE OF ALLOWABILITY" (PTOL-37 or PTO-37). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit the drawings will result in **ABANDONMENT** of the application.

The drawings should be submitted as a separate paper with a transmittal letter which is addressed to the Official Draftsperson. The art unit number, application number and number of drawing sheets should be written on the reverse side of the drawings.

7. **Any response to this allowance should be mailed to:**

**Box Issue Fee**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or FAXed to:**

(703) 308-9051, (for formal communications; please mark "EXPEDITED  
PROCEDURE")

**or:**

(703) 305-9508 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication should be directed to the examiner, Talivaldis Ivars Smits, whose telephone number is (703) 306-3011. The examiner can normally be reached Mondays-Fridays from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth, can be reached on (703) 308-4825. The facsimile phone number for this Group Art Unit is (703) 305-9508. With the consolidation into Technology Center 2700, effective November 16, 1997, the former Art Unit 2308 has become **Art Unit 2741**.


Any inquiry of a general nature or relating to the status of this application should be

Serial Number: 08/720,373  
Art Unit: 2741 (formerly 2308)

Page 9

directed to the Technology Center receptionist, whose telephone number is (703) 305-3900.

Dr. Talivaldis Ivars Smits  
Patent Examiner  
Art Unit 2741  
March 19, 1998

  
DAVID R. HUDSPETH  
SUPERVISORY PATENT EXAMINER  
GROUP 2700